

## REMARKS

This paper responds to the Office Action dated April 23, 2004.

**Objection to specification.** The Examiner objects to the specification because of a docket number at a location said by the Examiner to be at "page 4, line 3." This application was filed electronically, and thus it does not have page or line numbers; it has only paragraph numbers. The Examiner is requested to use paragraphs numbers henceforth when identifying locations within the specification.

The undersigned speculates that the Examiner is referring to filed paragraph 18 (published paragraph 20). On this assumption the undersigned has amended filed paragraph 18 as shown on a previous page.

Typographical errors in filed paragraph 105 have been corrected.

A new claim 7 has been added, identical to claim 1 but with the word "stored" inserted in three places to more specifically set forth the invention.

A new claim 8 has been added, identical to claim 1 but with the additional limitation that the controller draws power from the backplane and is not dependent for power upon the associated power supply unit, to more specifically set forth the invention. This limitation may be seen, for example, at filed paragraph 21 (published paragraph 23).

**Double patenting.** Application number 09/681,645 has been amended and now has no claim identical to any claim in the present application.

**Art rejection.** The Examiner rejects all claims 1-6 as supposedly obvious in view of a two-way combination of US pat. 5,475,295 to Hong ("Hong") and US pat. 6,553,500 to Sterzik et al.

("Sterzik").

A brief discussion of Hong is instructive.

Hong has a "main body" (Fig. 1A) and a "remote controller" (Fig. 1B). The remote controller can generate a wireless signal by its light-emitting diode LD2 which is received at the main body at phototransistor 20. In response to the signal, the main body uses circuitry 12 to test a voltage at battery 11. The results of the test are transmitted by the main body by its light-emitting diode LD1 and are received at phototransistor 40.

The Examiner has not pointed to anywhere in Hong where there is there a "backplane" nor is it possible to find in Hong a plurality of "devices" communicating by the backplane.

So far as the undersigned can discern, nowhere in Hong is there any step of information storage. Indeed the word "memory" cannot be found in Hong. Thus there is no storage of values relating to signals indicative of output voltages, no storage of scaling values, and no storage of power supply unit serial numbers.

So far as the undersigned can discern, nowhere in Hong is there any mention of power supply unit serial numbers or any other type of serial numbers. Indeed the word "serial" or "serial number" cannot be found in Hong.

So far as the undersigned can discern, nowhere in Hong is there any mention of scaling factors. Indeed the words "scaling" and "factor" cannot be found in Hong. The disclosure of Hong seems to make clear that the measurement of voltage by circuitry 12 is done in a way that is always the same – there seems to be no "scaling factor" for the measurement. Hong teaches an output that takes any of five possible values – 1111, 0111, 0011, 0001, and 0000. (This encoding is bit-wise inefficient, by the way, as it consumes four bits to communicate a mere five possible values. Three bits would have sufficed.) Nothing about the Hong disclosure hints at or suggests the

availability of any scaling factor for this measurement. Stating this point differently, a value of, say, "0111" always corresponds to some particular voltage and the "resolution" (voltage difference between adjacent values) is always the same with Hong.

The Examiner, in attempting to read the claims onto the disclosure of Hong, appears to suggest that the "devices" of the claims are the "remote controller" and that the "controller" of the claims is the "main body."

This reading by the Examiner appears to overlook that all of the claims are limited in that there is not merely one "device;" instead there is a "plurality of devices." For the reading onto Hong to succeed, there would thus apparently need to be a plurality of remote controllers all communicating with the main body. But Hong teaches away from such a reading, always referring to a remote controller in the singular. What's more, it appears to the undersigned that of one were to attempt to modify Hong by adding additional remote controllers, the resulting system would be failure-prone. Nothing in Hong addresses what would happen if users were to press buttons on two or more controllers at overlapping times. Collisions would result and messages would get garbled and lost. One skilled in the art in the field of Hong would know not to try to provide two or more controllers as they would conflict. One skilled in the art in the field of the claimed invention, where there are multiple devices communicating by means of a backplane, would not turn to the remote-control art of Hong where the use of two or more controllers would conflict.

In an effort to supply some of the claim limitations that are missing from Hong, the Examiner turns to Sterzik. But the Examiner has not pointed to anywhere in Sterzik where any of the missing limitations can actually be found. Sterzik does not, for example, contain scaling factors or serial numbers.

There is a further difficulty with the two-way combination urged by the Examiner, namely that Hong has to do with battery-powered remote controllers and Sterzik has to do with computer

power supplies. One skilled in the art of computer power supplies would not, it is suggested, turn to the art of battery-powered remote controllers.

Claim 1 reads as follows, with letters added for convenient reference to particular limitations:

A power supply unit controller for a rack enclosure in which [a] a plurality of devices communicate via [b] a backplane, said controller comprising:

means for reading at least one signal indicative of an output supply level being provided [c] to said backplane by a power supply unit associated with said power supply unit controller;

[d] memory for storing at least one value associated with a respective one of the at least one signal, [e] at least one scaling value associated with a respective one of the at least one signal and dependent on said power supply unit, and [f] a power supply unit serial number; and

communicating means, responsive to a request from [g] one of said devices, for a returning a state of said associated power supply unit to said requesting device, said state including a combination of:

a summary of the current status of the power supply unit,

said at least one value,

[h] said at least one scaling value, and

[i] said power supply unit serial number,

according to said device request.

The Examiner is requested to point out by column and line number where in either reference a backplane [b] may be found, and a plurality of devices [a] communicating via that backplane, and power being provided [c] to the backplane, as well as one of the devices giving a request [g], or failing that, to withdraw the rejection.

The Examiner is likewise requested to point out by column and line number where in either reference there may be seen the existence of [h] a scaling value and [i] a power supply unit serial

number, as well as [d] storing a value associated with an output supply level, and [e] storing a scaling value, and [f] storing a power supply unit serial number, or failing that, to withdraw the rejection.

The Examiner suggests (Office Action p. 4) that the missing scaling value may be seen at Hong col. 1, lines 44-45, but the undersigned is unable to find a scaling value there. Indeed as mentioned above the words "scaling" and "factor" cannot be found in Hong.

The Examiner admits that no serial number can be found in Hong, and thus turns to Sterzik. Close study of Sterzik, however, reveals that no serial number can be found there either. The Examiner states at Office Action page 4 that Sterzik supposedly says that "any other information" can be retrieved from a power supply unit. The undersigned is unable, however, to find this "any other information" teaching at the cited portions of Sterzik nor anywhere else in the reference. The Examiner is requested to point out by column and line number where this supposed teaching can be found or to withdraw the rejection.

There is a further problem which is that even if Sterzik did teach that "any other information" can be retrieved from a power supply unit (which, apparently, it does not) this would not count as a teaching of *any particular information* being retrieved. Sterzik does not stand, for example, for retrieving sports scores or jokes or news from a power supply unit, merely because "any other information" could supposedly be retrieved.

At page 4 the Examiner treats the terms "serial number" and "part number" as supposedly interchangeable or synonymous. Such is not the case. In general one might well expect two power supply controllers to have identical part numbers, yet one would never expect them to have identical serial numbers. (Serial numbers are generally unique while part numbers often are not.) The effort to treat the terms as interchangeable or synonymous is apparently motivated by the fact that the claims are limited with respect to serial numbers, while Sterzik lacks any serial numbers (but mentions a part number).

At page 4 the Examiner states, without support, that various things would supposedly be obvious to one skilled in the art, among them that it would supposedly be obvious to combine the two references (despite one reference being in the remote-control art and the other being in a different art) and that Sterzik supposedly shows it to be "clear" that serial numbers are "easily available" and "easily accessible". Applicant's attorney disagrees with these views, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges these views and asks whether the Examiner can show support for these views.

Claim 2 is:

A power supply unit controller according to claim 1 wherein said controller is arranged to store scaling values dependent on the supply levels supplied by the power supply unit associated with the controller.

Claim 2 differs from claim 1 *inter alia* in that there are "scaling values" in the plural. The Examiner had not pointed out anywhere in either reference where a single scaling value could be found. Yet claim 2 calls for a plurality of scaling values, thus all the more distinguishing over the cited references. Reconsideration is requested.

The Examiner states (Office Action page 5, paragraph 8) that a "routineer in the art" would store values in "the system's common memory" or "a controller could be provided with a memory to store different kinds of values and information. Even if this were so, it would not thus provide the storing of the *scaling* values in the claim. The Examiner then states, without support, that this makes the wording of the entire claim ("said controller arranged to store scaling values dependent on the supply levels supplied by the power supply unit associated with the controller") somehow obvious. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view.

Claim 3 is:

A power supply unit controller according to claim 1 wherein said device is a higher level processor arranged to monitor environmental conditions in an entire rack enclosure and the controller is responsive to a request from said processor to return said scaling values.

The Examiner states that this limitation may be found in Hong at col. 1, lines 44-55. The undersigned is, however, unable to find this limitation at the location suggested by the Examiner. The terms "higher level" and "rack enclosure" cannot, for example, be found in the reference.

Claim 4 is:

A power supply unit controller according to claim 1 wherein said controller is arranged to store a power supply unit serial number.

At page 5, paragraph 10 the Examiner treats the terms "serial number" and "part number" as supposedly interchangeable or synonymous. Such is not the case. In general one might well expect two power supply controllers to have identical part numbers, yet one would never expect them to have identical serial numbers. (Serial numbers are generally unique while part numbers often are not.) The effort to treat the terms as interchangeable or synonymous is apparently motivated by the fact that the claims are limited with respect to serial numbers, while Sterzik lacks any serial numbers (but mentions a part number).

At page 5, paragraph 10 the Examiner states, without support, that various things would supposedly be obvious to one skilled in the art, among them that it would supposedly be obvious to combine the two references (despite one reference being in the remote-control art and the other being in a different art) and that Sterzik supposedly shows it to be "clear" that serial numbers are "easily available" and "easily accessible". Applicant's attorney disagrees with these views, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges these views and asks whether the Examiner can show support for these views.

Claim 5 is:

A power supply unit controller according to claim 1 wherein said controller is responsive to a device request to condition the amount of information returned by the power supply unit controller in response to the request.

The Examiner states that Hong "teaches" that the controller is responsive "to condition the amount of information returned" and cites particular places within Hong. The undersigned has diligently studied the cited places within Hong and is unable to find this limitation.

Reconsideration is requested.

Claim 6 is:

A rack enclosure including a backplane, at least one power supply unit connected to and adapted to supply power to said backplane, each associated with a respective power supply unit controller according to claim 1, and a plurality of devices receiving power from said backplane, at least one of said devices adapted to communicate with the at least one power supply unit controller.

The Examiner has not pointed to anywhere in either cited reference where may be seen "a rack enclosure" or a "backplane." The Examiner has not pointed to anywhere in either cited reference where may be seen "a plurality of devices receiving power from said backplane" keeping in mind further that one of the devices must be "adapted to communicate with the at least one power supply unit controller." Reconsideration is requested.

New claim 7 has been added which differs from claim 1 as shown with underlining below:

A power supply unit controller for a rack enclosure in which a plurality of devices communicate via a backplane, said controller comprising:

means for reading at least one signal indicative of an output supply level being provided to said backplane by a power supply unit associated with said power supply unit controller;

memory for storing at least one value associated with a respective one of the at least one signal, at least one scaling value associated with a respective one of the at least one signal and dependent on said power supply unit, and a power supply unit serial number; and

communicating means, responsive to a request from one of said devices, for a returning a



state of said associated power supply unit to said requesting device, said state including a combination of:

a summary of the current status of the power supply unit,

said at least one stored value,

said at least one stored scaling value, and

said stored power supply unit serial number,

according to said device request.

This claim makes clear that the values communicated have previously been "stored." In this way the numerous distinctions between claim 1 and Hong are made even more clear, as the Hong does not appear to store anything at all, let alone storing scaling values, serial numbers, or values indicative of power supply output levels.

New claim 8 has been added which differs from claim 1 as shown with underlining below:

A power supply unit controller for a rack enclosure in which a plurality of devices communicate via a backplane, each said controller comprising:

means for reading at least one signal indicative of an output supply level being provided to said backplane by a power supply unit associated with said power supply unit controller;

memory for storing at least one value associated with a respective one of the at least one signal, at least one scaling value associated with a respective one of the at least one signal and dependent on said power supply unit, and a power supply unit serial number; and

communicating means, responsive to a request from one of said devices, for returning a state of said associated power supply unit to said requesting device, said state including a combination of:

a summary of the current status of the power supply unit,

said at least one value,

said at least one scaling value, and

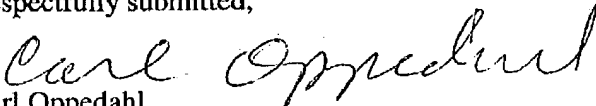
said power supply unit serial number,

according to said device request;

the controller requiring power to operate, the controller drawing said power from the backplane and thus not dependent upon said associated power supply unit for said power.

In Hong, the monitoring circuitry upon which the Examiner apparently attempts to read the claims is circuitry which (so far as the undersigned can discern) is powered by the very battery that is being monitored. This claim makes clear the distinction that the controller of the claim is able to draw power from the backplane and thus from a source other than the associated power supply unit.

Respectfully submitted,



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